

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/044779 A2

(51) International Patent Classification⁷: **C07C 231/02**,
231/24, 233/08

(74) Agent: **LONGONI, Alessandra**; Zambon Group, Intellectual Property Dept., Via Lillo del Duca, 10, I-20091 Bresso (IT).

(21) International Application Number:
PCT/EP2004/052894

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:
9 November 2004 (09.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
MI2003A002165
11 November 2003 (11.11.2003) IT

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **ZAMBON GROUP S.P.A.** [IT/IT]; Via della Chimica, 9, I-36100 Vicenza (IT).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **ARRIGHI, Katiuscia** [IT/IT]; Via Saronno, 52, I-20020 Misinto (IT). **CANNATA, Vincenzo** [IT/IT]; Via Annibale Clò, 12, I-40037 Sasso Marconi (IT). **CORCELLA, Francesco** [IT/IT]; Via San Michele, 47, I-20015 Parabiago (IT). **MARCHIORO, Gaetano** [IT/IT]; Via Paolo Calvi, 80, I-36100 Vicenza (IT). **NICOLI, Andrea** [IT/IT]; Via Monzambano, 50, I-36100 Vicenza (IT). **PAIOCCHI, Maurizio** [IT/IT]; Via Valsesia, 86/b, I-20152 Milano (IT). **VILLA, Marco** [IT/IT]; Via Stefini, 7, I-20125 Milano (IT).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **PROCESS FOR THE PREPARATION OF GABAPENTIN**

(57) Abstract: The present invention relates to an improved process for the preparation of gabapentin and, more particularly, to an improvement of the preparation reaction of 1,1-cyclohexanediacyetic acid monoamide, intermediate utilized in the preparation of gabapentin.

WO 2005/044779 A2